



CELLO

Sound Points: The Magic When Bow Meets String

by David Holmes

All our sound when bowing comes from that tiny, itchy bitsy spot where the bow touches the string, which—when I bother to think about it—is pretty amazing. It can be referred to as the sound point, the friction, grab, or bite spot, the happy molecule, the electrical outlet, where water comes out of a spray hose, etc. There are no limits to useful descriptions of that magic spot where all tone emanates from. It may seem silly and obvious to say (but I'll say it anyway): the sole purpose of the bow is to make the string vibrate. Getting it started vibrating is one technical obstacle; continuing it vibrating along its merry way is yet another.

Visual cues can be helpful for sound point awareness: *see* the vibrations of the string, or how wide can you make the string vibrate, or *look* how “fuzzy” the string is when playing. Any change in vibrations along the bow stroke will result in a change in sound. A student should be made aware of this fact. In the early stages of bow arm development it is probably good to spend a lot of time on getting the string to vibrate at a consistent width throughout a bow stroke in mostly one lane. Soon, thereafter though, it is neat to observe how a fast *marcato* bow stroke causes a wider vibration than a slower *staccato* stroke. At more advanced levels, when a bow stroke can have “multiple personalities” because of musical context, the awareness of the changes in the vibrations of the string can be observed visually, too.

Phyllis Young points out that the first inch of a bow stroke is worth \$5, and the rest of the bow stroke is worth only \$1. With that in mind, a good preparatory activity for sound point awareness is what I call the “loose tooth,” when I ask the student to wiggle the string silently back and forth to make it look like a loose tooth, which, I hope, helps a student silently control weight vs. speed at the micro level. If the string won't wiggle, there is too much weight (or perhaps too much bow arm or hand tension, too!). This activity is especially useful on the lower strings, since they are thicker and looser. The “shortest note in the world” is a logical extension of the loose tooth: start

near the frog and pull a down or up bow so that the string *vibrates only one time back and forth*. Starting with the bow arm against the cello can help with this at first. When done well, the shortest note in the world sounds like a “click” more than a note, but it shouldn't sound like a burp. The challenge of trying to do this creates focus and motivation from within the student, which is very desirable if not sometimes elusive. Using *pizzicato* as an analogy for the start of a bow stroke can help, too: the “pull” of the string with the right hand finger is like the “pull” with the bow hair. One other hint for improving the initial grab of a down bow on the string is to have the tip of the bow slightly closer to the player (so, farther away from the floor) than would actually be perpendicular to the string, which is an idea I doubted when I first encountered it, but have observed that it does indeed help the bow grab the string better.

The start of a bow stroke can often be regarded as a consonant sound: sometimes the sound parallels to the “d” sound. At other times it can be a “b,” “k,” “p” or “t” sound. Having a student actually say words with these consonants can be helpful prior to trying it on a cello. Observing how our lips, tongue and teeth work to make different consonant sounds can be an insightful linguistic study, which can translate into better cello playing.

The follow through of most bow strokes equals the vowel sounds of words, just like when we sing.

String teachers have so many excellent and creative images that improve how a student manipulates the bow after the initial stroke has set the string into motion. Below are a few ideas along those lines.

Using the Imagination:

- Bow through peanut butter (the creamy type, preferably).
- Glue your bow to the string.
- Bow as if through mud.
- Wipe mud off your bow with the string. Wiping feet on the floor as if trying to get mud off of them can be a

good “awakening” for this idea.

- Wipe dog doo off your bow with the string. Gross, but useful and humorous.
- Pull something heavy across the floor (I have had students drag each other across the floor by their legs. It really helps with that resistance, friction idea and it is super silly and fun. The person being dragged feels the “resistance” in their bum and bodies, and the person dragging feels it in their bodies and arms.) The immediate difference in tone is impressive after dragging something heavy.
- Rip apart a velcro fastener. Feel that friction. Feel that resistance. (Supplying a velcro device can be helpful.)
- Bow and arrow: the energy of the preparatory motion before shooting an arrow parallels to the energy of the initial weight in the string before any motion occurs. Now release all that energy by moving the bow, which is good for *marcato* type strokes. (Kids these days, however, don't shoot bows and arrows as much as I did when I was little, so this concept is lost on some of them.) Shooting a rubber band can be used as a similar type of pent up energy followed by a release.
- Lean into the string with your bow.
- Pull the bow weight toward your belly button. This is good if the bow is drifting into various unintended lanes. It gives a specific spot to aim for, and can be improve sound quality quickly. Sometimes, depending on a student's tendencies, directing the weight of the bow down toward the ground or toward another “spot” can help as well.
- Notice the spongy quality of the tilted bow on the string. When a student plays with flat hair, it is difficult to feel that rubbery quality that is so useful at the spot where bow meets string. Flat hair is good for helping the bow bounce, though.
- Imagine bowing through honey, or

water, or sand paper, or silk, or fleece,
etc...

I hope some of these ideas are helpful!

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